NORTEL

Nortel Communication Server 1000

IP Phone 2004

User Guide

Nortel Communication Server 1000

IP Phone 2004 User Guide

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July 2006

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June 2001

Standard 1.00.

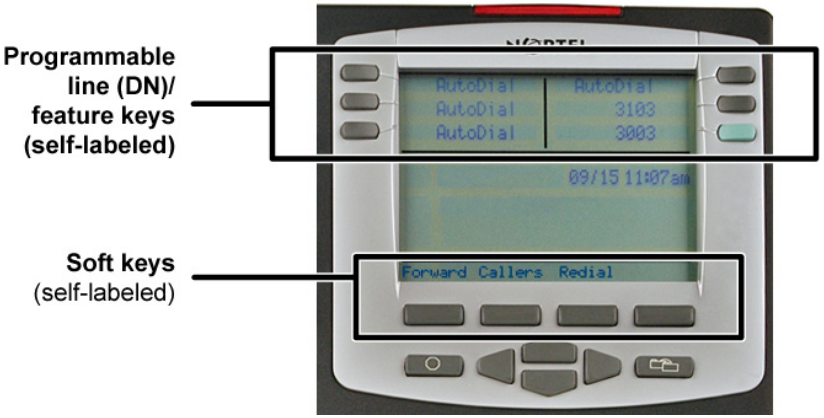
About the Nortel IP Phone 2004

The Nortel IP Phone 2004 brings voice and data to the desktop by connecting directly to a Local Area Network (LAN) through an Ethernet connection.

Note 1: All features are not available on all telephones. Consult your system administrator to verify which features are available for your use.

Note 2: In this guide, programmable line (DN) and feature key labels appear beside the key, and context-sensitive soft key labels appear directly above the key. Figure 1 shows key labels.

Figure 1: Programmable line (DN) and feature key and soft key labels



IP Phone 2004 models

There are three models of the IP Phone 2004, referred to as Phase 0, Phase 1, and Phase 2. The higher level models have some features that are not available on the lower level models. To determine the model of your telephone, turn the telephone over and locate the label containing the product code (NT code). The NT code identifies the model of your telephone.

Table 1: IP Phone 2004 model codes

Product code	Model
NTEX00xx or NT7B10AACH	Phase 0
NTDU82xx	Phase 1
NTDU92xxxx	Phase 2

Note: xx or xxxx represents any valid character.

Basic features

The IP Phone 2004 supports the following features:

- 12 programmable feature keys: six (physical) user-defined feature key labels and six lines or features accessed by pressing the **Shift** key
- four context-sensitive soft keys that provide access to a maximum of 10 features

  For information about context-sensitive soft keys, see *New in This Release Communication Server 1000 Release 5.0* (NN43001-115).

  Note: All IP Phone 2004 phones are not configured to support soft key functionality. Consult your system administrator for details about the configuration of your telephone.

- multifield LCD display screen
- speaker for on-hook dialing or on-hook listening

- volume control bar for adjusting ringer, speaker, handset, and headset volume
- six specialized fixed keys:
  - Quit
  - Directory
  - Message (Inbox)
  - Outbox or Shift
  - Services
  - Expand to PC
- four call processing fixed keys:
  - Hold
  - Goodbye
  - Handsfree
  - Mute
- shared LAN access with a PC
- headset jack with On or Off key
- automatic network configuration
- hearing-aid compatibility

Telephone display

The LCD screen on the IP Phone 2004 has three display areas:

- The upper display area is for user-defined feature key labels.
- The middle display area is for single-line information such as caller number, caller name, feature prompt strings, user-entered digits, date and time (or call timer, if provisioned in the Telephone Options menu), and telephone information.
- The lower display area is for context-sensitive soft key labels.

Figure 2: IP Phone 2004 LCD display areas

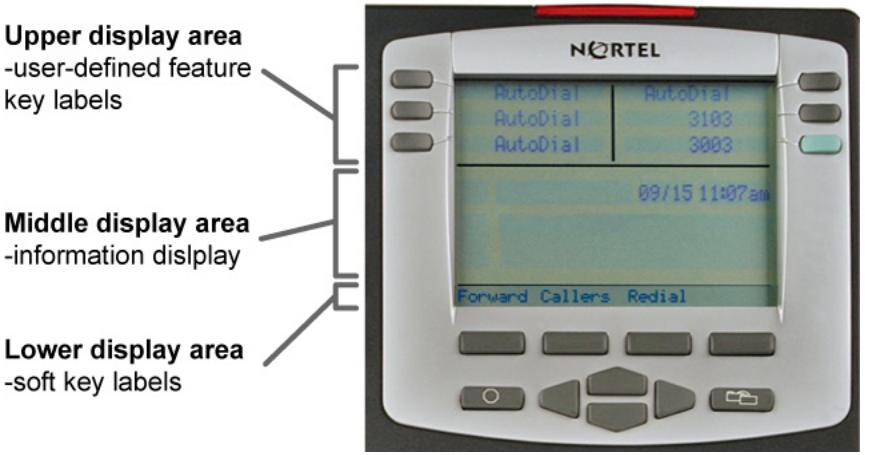
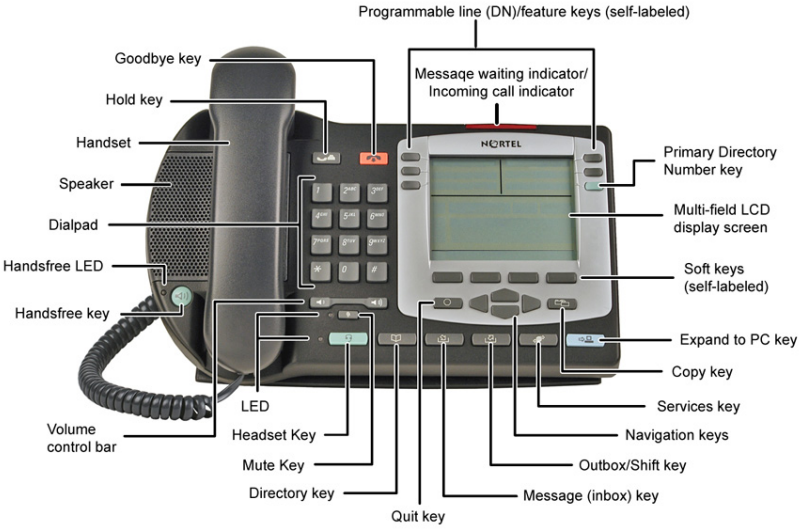


Figure 3: IP Phone 2004

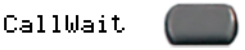


Telephone controls

Note: Some IP Phone 2004 phones are equipped with optional key caps. Text in parentheses indicates labels appearing on the key caps. For example, (Services).

Use the **Volume control** bar to adjust the volume of the ringer, handset, headset, speaker, and the Handsfree feature. Press the right side of the rocker bar to increase volume and press the left side to decrease volume.

Use the **Primary Directory Number** (DN) to access a single line and activate on-hook dialing.



Programmable line (DN) and feature keys are extra DNs or feature keys used to access additional features.

A steady LCD light beside a line (DN) key indicates that the line is active. A flashing LCD indicates that the line is on hold.

A steady LCD light beside a feature key indicates that the feature is active. A flashing LCD indicates that the feature is being programmed.

(Goodbye)

Use the **Goodbye** key to terminate an active call.

(Hold)

Press the **Hold** key to put an active call on hold. Press the line (DN) key beside the flashing LED indicator to return to the caller on hold.

(Msg/Inbox)

Press the **Message (Inbox)** key to access your voice mailbox.

Use the **Navigation** keys to scroll through menus and lists appearing on the LCD display screen.

(Services)

Press the **Services** key and use the navigation keys to access the following items:

- Telephone Options:
  - — Volume adjustment
  - — Contrast adjustment
  - — Language
  - — Date and Time
  - — On-hook default path
  - — Live dialpad
  - — Call timer
  - — Display diagnostics
  - — Local dialpad tone
  - — Ring type
  - — Change feature key label
  - — Set information
- Password admin:
  - — Station control password
- Virtual Office Login and Virtual Office Logout (if Virtual Office is configured)
- Test Local Mode and Resume Local Mode (if Media Gateway 1000B is configured)

Note 1: Press the **Services** key to exit from any menu or menu item.

Note 2: The **Password Admin** menu many not be available on your IP Phone 2004. Consult your system administrator.

Press the **Headset** key to answer a call using the headset or to switch a call from the handset or handsfree to the headset.

Press the **Speaker** key to activate handsfree. The speaker LED indicator lights to indicate when handsfree is active.

(Shift)

Press the **Outbox/Shift** key to toggle between two feature key pages and to access an additional six lines or features and an additional 24 lines on the Nortel IP Phone Key Expansion Module (KEM).

(Directory)

Press the **Directory** key to access directory services.

(Mute)

Press the **Mute** key to listen to the receiving party without transmitting. Press the **Mute** key again to return to two-way conversation. The **Mute** key applies to handsfree, handset, and headset microphones. The Mute LED indicator flashes if the Mute option is in use.

(Quit)

Press the **Quit** key to end an active application. Pressing the **Quit** key does not affect the status of calls currently on your telephone.

Context-sensitive soft keys (self-labeled) are located below the LCD display screen. The LCD label above the key changes based on the active feature.

Note: If a triangle appears before a soft key label, the feature is active.

Press the **More..** soft key to access the next layer of soft keys (self-labeled).

If a message is left for the user, the **Message Waiting Indicator (MWI)** flashes. Also, this indicator flashes to indicate an incoming call when the telephone ringer is on.

(Expand)

Use the **Expand to PC** key to access external server applications.

Press the **Copy** key to copy entries to your Personal Directory from other lists, such as the Caller List, Redial List, and Corporate Directory.

Call features and Flexible Feature Codes

System administration is required for call features and Flexible Feature Codes (FFCs). Contact your system administrator to configure these features and codes on your telephone.

The Call features and FFCs must be assigned to your telephone and supported by system software.

Security features

This section describes the following features, which are designed to enhance the security of your IP Phone 2004:

- Using encrypted calling
- Managing your Station Control Password

Using encrypted calling

Your IP Phone 2004 supports secure communication using Secure Real-Time Protocol (SRTP) media encryption. If the feature is enabled, a security icon (q) appears on the screen next to the dialed number when your call is encrypted. Contact your system administrator to find out if this feature is enabled on your telephone.

Managing your Station Control Password

Your Station Control Password (SCPW) enables the following security features:

- Electronic lock to prevent others from making calls from your telephone.
- Password-protected telephone features (for example, Personal Directory, Redial List, and Callers List).

Your initial SCPW is defined by your system administrator. For detailed information about your SCPW, contact your system administrator.

To change your SCPW:

(Services)

1. Press the **Services** key.

2. Press the **Up/Down** keys to scroll and to highlight **Password Admin**.

3. Press the **Select** soft key.

4. Use the dialpad to enter your password at the prompt.

5. Press the **Up/Down** keys to scroll and to highlight **New Password**.

6. Press the **Select** soft key.

7. Use the dialpad to enter the new password.

8. Press the **Select** soft key to accept the new password.

   Note: If you have been locked out of your IP Phone 2004, or have forgotten your SPCW, contact your system administrator.

Note: The default configuration for Password Protection is off.

To turn Password Protection On or Off:

(Directory)

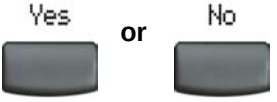
1. Press the **Directory** key.

2. Press the **Up/Down** navigation keys to scroll and to highlight **Change Protection Mode**.

3. Use the dialpad to enter your password (if Password Protection is enabled).

4. Press the **Enter** soft key.

5. Press the **Up/Down** navigation keys to scroll and highlight one of the following:
   - **Enable Password Protection**
   - **Disable Password Protection**



6. Choose one of the following soft keys:
   - **Yes** to accept the selection.
   - **No** to return to the Directory menu.

7. Press the **Done** soft key.

Entering and editing text

You can enter and edit text on your IP Phone 2004 using the following methods in conjunction with each other:

- Enter and edit text using the telephone dialpad
- Edit text using the soft keys

Entering text using the telephone dialpad

You can use the dialpad to enter text when you use features such as Personal Directory, Redial List and Callers List.

For example, if you want to enter the letter A, press the number **2** key once. If you want to enter the letter C, press the number **2** key three times.

Note: No letters are associated with the number 1 or the 0 keys.

Editing text using the soft keys

You can use soft keys to edit text when you use features such as Personal Directory, Redial List, and Callers List.

To edit an entry in your Personal Directory, press the **Directory** key, and select the desired entry from your Personal Directory.

To edit text:

1. Press the **Edit** soft key.
2. Press the **Left/Right** navigation keys to move through the text.
3. Select the appropriate editing soft key for the operation you want to perform.
4. If the key you want is not visible, press the **More..** soft key to access the next layer of soft keys.
5. Press the **Up** navigation key to access the symbols.

6. Press the **Left/Right** navigation keys to move to a specific symbol.
7. Press the **Choose** soft key to select a symbol.
8. Press the **Next** soft key to submit your changes.

Table 2 describes the soft key editing functions on the IP Phone 2004.

Table 2: Editing soft key description

Soft key	Description
Cancel	Action is cancelled.
Choose	Select a symbol.
Clear	Clear the input field.
Case	Switch the next character to either uppercase or lowercase.
Delete	Backspace one character.
Done/Select/Enter	Meaning depends on application.
More…	Access additional soft keys.

Connecting the components

Before you begin

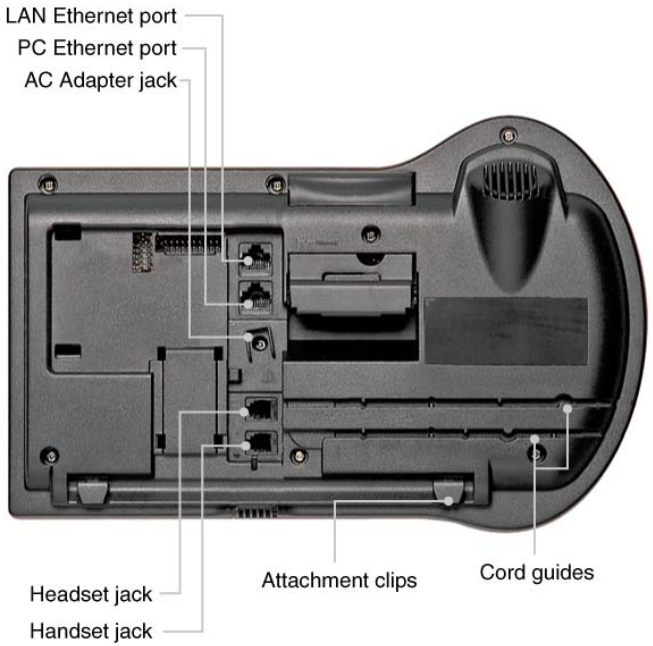
CAUTION
Damage to Equipment
Do not plug the IP Phone 2004 into a regular telephone jack. This results in severe damage to the IP Phone. Consult your system administrator to ensure that you plug your telephone into a 10/100BaseT Ethernet jack.

Connecting the telephone components

1. Connect one end of the handset cord to the handset jack (identified with a handset icon) on the back of the telephone. Connect the other end to the jack on the handset.
2. Choose one of the following connections:
   a. For a telephone not sharing LAN access with a PC, connect one end of the CAT5e line cable to the LAN Ethernet port located on the back of the telephone (identified with a LAN icon). Plug the other end of the CAT5e line cable into the IP network.
   b. For a telephone sharing LAN access with a PC, connect one end of the CAT5e line cable to the LAN Ethernet port located on the back of the telephone (identified with a LAN icon) and the other end to the IP network. Insert a second CAT5e line cable into the PC Ethernet port located on the back of the telephone (identified with a PC icon) and the other end into the computer's Ethernet port.
3. Contact your installation technician for the proper power option. This telephone can be powered by an AC adapter or over a LAN.
4. Thread the cord around the strain relief, retaining hook, and channel provided for a secure power connection.
5. Secure the telephone footstand to the telephone base. Use the angle grip on the top back of the telephone to change position.

Figure 4 shows connections on the IP Phone 2004.

Figure 4: IP Phone connections



Configuring options

The IP Phone 2004 **Services** menu lists the following submenus:

- The **Telephone Options** menu is used by your system administrator to configure telephone preferences.
- The **Password Admin** menu is used by your system administrator to change the SCPW.
- The **Virtual Office Login** and **Test Local Mode** (for branch office) menus are listed when an IP Phone 2004 Class of Service is configured for Virtual Office and branch office. (For more information see page 109).

  Note: The **Password Admin**, **Virtual Office Login**, and **Test Local Mode** menus are not available on all IP Phone 2004 phones. Contact your system administrator for information about what menus are available on your telephone.

Using the Telephone Options menu

Use the Telephone Options menu to access the following:

- “Adjusting the volume” on page 29
- “Adjusting the display screen contrast” on page 30
- “Selecting a Language” on page 31
- “Selecting Date and Time format” on page 31
- “Enabling On-Hook Default Path” on page 32
- “Configuring Live Dialpad” on page 33
- “Enabling and disabling Call timer” on page 33
- “Using Display Diagnostics” on page 34
- “Choosing Local Dialpad Tone” on page 35
- “Choosing a Ring type” on page 35
- “Changing feature key labels” on page 36

- “Viewing telephone information” on page 38

Note: When an option has a sublist, an ellipsis (...) appears after the option.

To use the Telephone Options menu:

(Services)

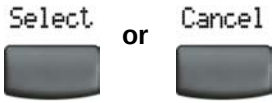
1. Press the **Services** key.

2. Press the **Up/Down** navigation keys to scroll and to highlight the **Telephone Options**.

3. Press the **Select** soft key.

4. Press the **Up/Down** navigation keys to scroll and to highlight an option (for example, **Language…**).

5. Press the **Select** soft key. The display provides information required to adjust your selection.



6. Choose one of the following:
   - Press the **Select** soft key to save changes and return to the **Telephone Options** menu.
   - Press the **Cancel** soft key to keep existing configurations.

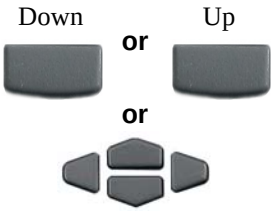
Adjusting the volume

To adjust the volume, press the **Services** key, select **Telephone Options**, and select **Volume adjustment...** from the menu. Select **Ringer**, **Handset**, **Handsfree**, **Headset**, or **Buzzer**.

To adjust the volume:

1. Press the **Up/Down** navigation keys to scroll and to highlight one of the following:
   - **Ringer**
   - **Handset listen**
   - **Handsfree listen**
   - **Headset listen**
   - **Buzzer**

2. Press the **Select** soft key.



3. To increase or decrease the volume, do one of the following:
   - Press the **Down/Up** soft keys.
   - Press the **Up/Down** navigation keys.

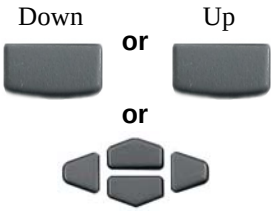
4. Choose one of the following:
   - Press the **Select** soft key to save the volume level and return to the **Telephone Options** menu.
   - Press the **Cancel** soft key to keep existing configurations.

Adjusting the display screen contrast

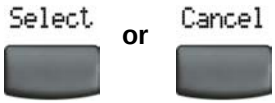
To adjust the LCD display screen contrast, press the **Services** key, select **Telephone Options**, and select **Contrast adjustment** from the menu.

Note: If you have a Nortel IP Phone KEM attached to your telephone, adjusting the telephone's LCD display screen contrast also adjusts the display screen contrast configuration for the IP Phone KEM.

To adjust the display screen contrast:



1. To increase or decrease the display contrast level, choose one of the following:
   - Press the **Down/Up** soft keys.
   - Press the **Up/Down** navigation keys.



2. Choose one of the following:
   - — Press the **Select** soft key to save the changes and return to the **Telephone Options** menu.
   - — Press the **Cancel** soft key to keep existing configurations.

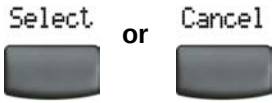
Selecting a Language

The display is available in multiple languages. To choose a language, press the **Services** key, select **Telephone Options**, and select **Language...** from the menu.

To select a Language:

1. Press the **Up/Down** navigation keys to scroll and to highlight the desired language (for example, German [Deutsche]).

   Note: Some languages may not be installed on your IP phone. Contact your system administrator for more information on available languages.



2. Choose one of the following:
   - — Press the **Select** soft key to save the desired language and return to the **Telephone Options** menu.
   - — Press the **Cancel** soft key to keep existing configurations.

Selecting Date and Time format

Several date and time formats are available. Formats are based on the 12-hour and 24-hour clocks. To select a date and time format, press the

Services key, select **Telephone Options**, and choose **Date/Time…** from the menu.

To select the date and time:

1. Press the **Up/Down** navigation keys to scroll and to highlight the desired format. Sample formats appear on the upper-right side of the display area.

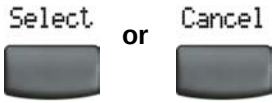
2. Choose one of the following:
   - Press the **Select** soft key to save the format and return to the **Telephone Options** menu.
   - Press the **Cancel** soft key to keep existing configurations.

Enabling On-Hook Default Path

The On-Hook Default Path option allows you to use a Headset or the Handsfree feature to operate your IP Phone while it is on-hook.To enable the on-hook default path feature, press the **Services** key, select **Telephone Options**, and then select **OnHook Default Path** from the menu.

To enable the On-Hook Default Path feature:

1. Press the **Up/Down** navigation keys to highlight one of the following:
   - **Handsfree enable**
   - **Headset enable**



2. Choose one of the following:
   - — Press the **Select** soft key.
   - — Press the **Cancel** soft key to keep existing configurations.

Configuring Live Dialpad

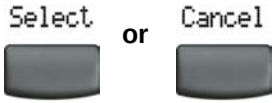
Use Live Dialpad to dial a number using the telephone keypad without having to pick up the handset, press the Handsfree key, or press the Line (DN) key.

Note: Live Dialpad activates the primary DN key.

To configure Live Dialpad, press the **Services** key, select **Telephone Options**, and select **Live Dialpad** from the menu.

To configure Live Dialpad:

1. Press the **Up/Down** navigation keys to highlight one of the following:
   - — **On**
   - — **Off**



2. Choose one of the following:
   - — Press the **Select** soft key to save the configuration.
   - — Press the **Cancel** soft key to keep existing configurations.

Enabling and disabling Call timer

The Call timer measures how long you are on each call. To enable or disable the Call timer feature, press the **Services** key, select **Telephone Options**, and select **Call Timer** from the menu.

To enable or disable the Call timer:

1. Choose one of the following:
   - To enable the call timer, press the **On** soft key.
   - To disable the call timer, press the **Off** soft key.

2. Choose one of the following:
   - Press the **Select** soft key to save the configuration and return to the **Telephone Options** menu.
   - Press the **Cancel** soft key to keep existing configurations.

Using Display Diagnostics

The Display Diagnostics option tests the display screen and indicator lights on the telephone. To access the Display Diagnostics feature, press the **Services** key, select **Telephone Options**, and select **Display Diagnostics** from the menu.

To select Display Diagnostics:

1. Press the **Up/Down** navigation keys to scroll through the list to view display capabilities.

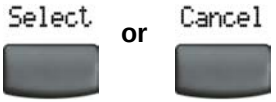
2. Press the **Cancel** soft key to return to the **Telephone Options** menu.

Choosing Local Dialpad Tone

The Local Dialpad Tone option produces dual-tone multifrequency (DTMF) sounds, a single tone, or no sound after you press a key on the dialpad. To choose a Local Dialpad Tone, press the **Services** key, select **Telephone Options**, and select **Local DialPad Tone** from the menu.

To choose a Local Dialpad Tone:

1. Press the **Up/Down** navigation keys to scroll and to highlight one of the following dialpad tones:
   - — **None** to disable all tones.
   - — **Short Click** to enable a single tone for all keys.
   - — **DTMF** to turn on a separate DTMF tone for each key.



2. Choose one of the following:
   - — Press the **Select** soft key to save the tone selection and return to the **Telephone Options** menu.
   - — Press the **Cancel** soft key to keep existing configurations.

Choosing a Ring type

The Ring type option configures the ring tone on the telephone. To choose a ring type, press the **Services** key, select **Telephone Options**, and select **Ring type…** from the menu.

To select a Ring type:

1. Press the **Up/Down** navigation keys to scroll and to highlight one of the ring types.

2. Press the **Play** soft key to sample the ring tone.

3. Choose one of the following:
   - Press the **Select** soft key to save the ring type and return to the **Telephone Options** menu.
   - Press the **Stop** soft key and use the **Up/Down** navigation keys to select a different ring type.
   - Press the **Cancel** soft key to keep existing configurations.

Changing feature key labels

The Change feature key labels option renames the label that appears next to each feature key or restores the default labels to the keys (collectively or individually). To rename feature key labels, press the **Services** key, select **Telephone Options**, and select **Change feature key labels** from the menu.

Note: If a feature key is configured as an Autodial key, the label does not change if the Autodial key configuration changes.

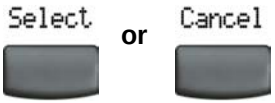
To rename the labels:

1. Press the **Select** soft key.

2. Press the feature key that is being changed.

   Note: If you press a prime DN key, an error message appears.

3. Enter the new information for the feature key label. To enter special characters, press the **Up** navigation key. For information about entering text, see “Entering text using the telephone dialpad” on page 23.



4. Choose one of the following:

   — Press the **Select** soft key to save the changes and return to the **Telephone Options** menu.

   — Press the **Cancel** soft key to keep existing configurations.

Restore the default labels:

To restore feature key labels, press the **Services** key, select **Telephone Options**, and select **Change feature key labels** from the menu.

1. Press the **Select** soft key.

2. Use the **Up/Down** navigation keys to scroll and to highlight one of the following:

   a. Restore all key labels

   — Press the **Yes** soft key to change all feature keys to default values.

   b. Restore one key label

   — Press the **Select** soft key.

   — Press the feature key.

   — Press the **Yes** soft key to change the selected feature key label to the default value.

   Note: When labels are changed to default values, you cannot undo the change. The label configurations must be reentered.

Viewing telephone information

The following telephone-specific information appears with the Set Info option:

- General Info
- Set IP Info
- Ethernet Info
- Server Info
- Location Info
- Encryption Info

To view telephone information, press the **Services** key, select **Telephone Options**, and select **Set Info** from the menu.

To view telephone information:

1. Press the **Up/Down** navigation keys to scroll through the list to view telephone information.

2. Press the **Cancel** soft key to return to the **Telephone Options** menu.

Configuring call log options

Use the call log option to configure the following preferences:

- “Configuring the Callers List log” on page 39
- “Configuring New Call indication” on page 40
- “Configuring Preferred Name Match” on page 41
- “Configuring Area Code Setup” on page 42

Configuring the Callers List log

You can configure the Callers List to log all incoming calls or only unanswered calls. The default configuration is Log all calls. To log only unanswered calls, press the **Services** key, select **Telephone Options**, and select **Call Log Option** from the menu.

To log only unanswered calls:

1. Press the **Up/Down** navigation keys to scroll and to highlight the **Log Mode** option.

2. Press the **Select** soft key.

3. Press the **Up/Down** navigation keys to scroll and to highlight **Log unanswered calls**.

4. Choose one of the following:

— Press the **Select** soft key to save the configuration.

— Press the **Cancel** soft key to keep existing configurations.

Configuring New Call indication

You can configure the IP Phone 2004 to display a message to indicate a new incoming call was received. The default configuration is On. To configure new call indication, press the **Services** key, select **Telephone Options**, and select **Call Log Option** from the menu.

To configure New Call indication:

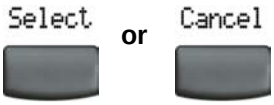
1. Press the **Select** soft key to select **Incoming Calls**.

2. Press the **Select** soft key.

3. Press the **Up/Down** navigation keys to scroll and to highlight **New Call Indication**.

4. Press the **Select** soft key.

5. Press the **Up/Down** navigation keys to scroll and highlight one of the following:
   - **New call indication off**
   - **New call indication on**



6. Choose one of the following:
   - Press the **Select** soft key to save the configuration.
   - Press the **Cancel** soft key to keep existing configurations.

Configuring Preferred Name Match

You can configure the IP Phone 2004 to display the name of the caller as defined in your Personal Directory. The default configuration is Off. To configure Preferred Name Match, press the **Services** key, select **Telephone Options**, and select **Call Log Option** from the menu.

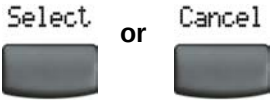
To configure Preferred Name Match:

1. Press the **Up/Down** navigation keys to scroll and to highlight **Preferred Name Match**.

2. Press the **Select** soft key.

3. Press the **Up/Down** navigation keys to scroll and highlight one of the following:
   - **Preferred name match on**
   - **Preferred name match off**

4. Choose one of the following:
   - Press the **Select** soft key to save the configuration.
   - Press the **Cancel** soft key to keep existing configurations.



Configuring Area Code Setup

Using the Area Code menu, a user can save up to 3 area codes. After an incoming call arrives with an area code that matches one of the 3 stored area codes, the incoming call number is reordered to display the telephone number followed by the area code (as opposed to the area code followed by the telephone number).

This reordering is also performed when you scroll through your Callers List.

To configure the area code, press the **Services** key, select **Telephone Options**, and select **Call Log Option** from the menu.

To configure default area codes (3 maximum):

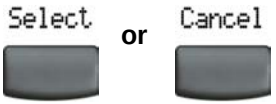
1. Press the **Up/Down** navigation keys to scroll and to highlight **Area Code Setup**.

2. Press the **Select** soft key.

3. Press the **Up/Down** navigation keys to scroll and to highlight one of the following:
   - — Area Code # 1
   - — Area Code # 2
   - — Area Code # 3

4. Press the **Select** soft key.

5. Use the dialpad to enter the number at the prompt.



6. Choose one of the following:
   - — Press the **Select** soft key to save the configuration.
   - — Press the **Cancel** soft key to keep the existing configurations.

To edit the area code display:

1. Press the **Up/Down** navigation keys to scroll and to highlight **Area Code Setup**.

2. Press the **Select** soft key.

3. Press the **Up/Down** navigation keys to scroll and to highlight one of the following:
   - — Area Code # 1
   - — Area Code # 2
   - — Area Code # 3

4. Press the **Select** soft key.

5. Use the dialpad to edit the number.

6. Choose one of the following:
   - — Press the **Select** soft key to save the configuration.
   - — Press the **Cancel** soft key to keep existing configurations.

Configuring Name Display format

You can configure the IP Phone 2004 to display the name of the incoming calling party in the following formats:

- first name, last name
- last name, first name

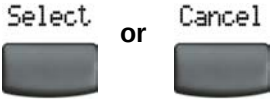
To configure the Name Display Format, press the **Services** key and select **Telephone Options**.

To configure the Name Display Format:

1. Press the **Up/Down** navigation keys to scroll and to highlight **Name Display Format**.

2. Press the **Select** soft key.

3. Press the **Up/Down** navigation keys to scroll and to highlight one of the following:
   - **first name, last name**
   - **last name, first name**



4. Choose one of the following:
   - Press the **Select** soft key to save the configuration.
   - Press the **Cancel** soft key to keep existing configurations.

Making a call

This section describes features associated with making a call. You can make a call from an IP Phone 2004:

- “Using off-hook dialing” on page 46
- “Using on-hook dialing” on page 47
- “Using Handsfree dialing” on page 48
- “Using Live Dialpad” on page 50
- “Using Predial” on page 54
- “Using AutoDial” on page 56
- “Using Ring Again” on page 57
- “Using Redial” on page 58
- “Using Speed Call” on page 59
- “Using System Speed Call” on page 60
- “Using Hot Line” on page 61
- “Using Intercom calling” on page 61

Using off-hook dialing

Use the off-hook dialing option to dial the number after you have lifted the handset.

1. Lift the handset.

2. Dial the number.

or

(Goodbye)

3. To terminate the call, choose one of the following:
   - — Return the handset to the cradle.
   - — Press the **Goodbye** key.

Using on-hook dialing

Use on-hook dialing to dial the number before lifting the handset.

1. Leave the handset in the cradle.

2. Press the line (DN) key.

3. Dial the number when the dial tone sounds.

4. After the called party answers, lift the handset.

or

(Goodbye)

5. To terminate the call, choose one of the following:
   - — Replace the handset into the cradle.
   - — Press the **Goodbye** key.

Using Handsfree dialing

Use Handsfree dialing to use a built-in microphone and speaker or a headset instead of the handset. While on an active call, you can switch between handset and handsfree mode.

1. Press the **Handsfree** key.

2. If a headset is connected, press the **Headset** key.

3. Dial the number.

To discontinue a Handsfree call:

(Goodbye)

Press the **Goodbye** key.

To mute a Handsfree call:

(Mute)

1. Press the **Mute** key. The LED indicator flashes.

(Mute)

2. Press the **Mute** key again to return to a two-way handsfree conversation.

To switch from Handsfree to Handset mode:

Lift the handset.

To switch from Handset mode to Handsfree mode:

1. Press the **Handsfree** key.

2. Replace the handset.

To use a Headset:

1. Connect the **headset** to the headset jack or the handset jack.

2. Press the **Headset** key.

To switch from Handsfree to Headset:

1. Press the **headset** key.

Using Live Dialpad

Use Live Dialpad to dial the number without having to lift the handset, press the Handsfree key, or press the line (DN) key.

1. Leave the handset in the cradle.

2. Dial the number.

3. After the called party answers, lift the handset.

4. To terminate the call, choose one of the following:
   - Replace the handset into the cradle.
   - Press the **Goodbye** key.

Using the Directory applications

You can make calls using the following Directory applications available on your IP Phone 2004.

- “Making a call using Corporate Directory” on page 50
- “Making a call using Personal Directory” on page 52
- “Making a call using the Callers List” on page 52
- “Making a call using Redial List” on page 54

Making a call using Corporate Directory

The Corporate Directory feature provides an alphabetical list of entries using last names. You can search by name, view additional information

on each entry, and dial Corporate Directory numbers. To use Corporate Directory, press the **Directory** key and select **Corporate Directory**.

To search for a specific number:

1. When prompted, use the dialpad to enter the desired name in the lastname/ firstname format.

2. Press the **Search** soft key to find the desired name.

   Note: The first match on the screen appears when there is a successful search.

3. Choose one of the following:

   — Press the **Dial** soft key to dial the resulting number.

   — If there is no match to the search query, start a new search or change the information in the initial search.

   — Press the **Cancel** soft key to exit without dialing.

To scroll to a specific number:

1. Press the **Up/Down** navigation keys to scroll and to highlight a name in the Corporate Directory.

2. Choose one of the following:
   - — Press the **Dial** soft key to dial the resulting number.
   - — Press the **Cancel** soft key to exit without dialing.

Making a call using Personal Directory

Using the Personal Directory feature, you can store a maximum of 100 entries consisting of names and numbers. To use the Personal Directory, press the **Directory** key and select **Personal Directory**. For more information on how to configure and use Personal Directory, refer to “Using Personal Directory” on page 102.

To use the Personal Directory:

1. Press the **Up/Down** navigation keys to scroll and to highlight a name in the **Personal Directory**.

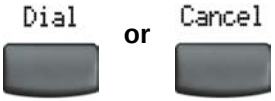
2. Choose one of the following:
   - — Press the **Dial** soft key to dial the resulting number.
   - — Press the **Cancel** soft key to exit without dialing.

Making a call using the Callers List

The Callers List feature automatically stores up to a maximum of 100 callers. After 100 callers have been stored, each additional caller overwrites the oldest entry. To use the Callers List, press the **Directory** key and select **Callers List**. For information about how to configure and use Callers list, see “Using Callers List” on page 105.

To use the Callers List:

1. Press the **Up/Down** navigation keys to scroll and to highlight a name in the **Callers List.**



2. Choose one of the following:
   - Press the **Dial** soft key to dial the resulting number.
   - Press the **Cancel** soft key to exit without dialing.

Making a call using Redial List

The Redial List feature automatically stores a maximum of 20 previously dialed telephone numbers. To use Redial List, press the **Directory** key and select **Redial List**. For information about how to configure and use Redial list, see “Using Redial List” on page 107.

To use the Redial List:

1. Press the **Up/Down** navigation keys to scroll and to highlight a name in the **Redial List**.

2. Choose one of the following:
   - — Press the **Dial** soft key to dial the resulting number.
   - — Press the **Cancel** soft key to exit without dialing.

Using Predial

Use the Predial feature to enter, preview, and edit numbers before dialing.

To use Predial:

1. Without selecting the line key, enter the number to be dialed.

2. Press a line key to dial the number.

3. Lift the Handset after the called party answers or, if in Handsfree mode, begin to speak.

To edit a Predial number:

1. Use the dialpad to enter the number.

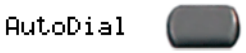
2. Choose one of the following:
   - To erase all numbers, press the **Clear** soft key. Reenter the numbers to be dialed.
   - To change numbers one at a time, press the **Delete** soft key to backspace. Reenter the number.

3. Press a line key to dial the number.

Using AutoDial

Use the AutoDial feature to display, store, and automatically dial telephone numbers.

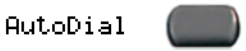
To store an AutoDial number:



1. Without lifting the handset, press the appropriate **AutoDial** key.

   Note: The word AutoDial appears next to the appropriate key on the display screen.

2. Using the dialpad, dial the telephone number (including access code) to be stored on the selected **AutoDial** key.



3. Press the **AutoDial** key a second time to store the number on the selected key.

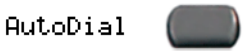
   Note: After a number is stored, the word AutoDial disappears, and the stored number appears.

4. Assign a label to the key.

   Note: After you assign the label, the number disappears and only the label appears on the screen next to the key.

To display an AutoDial number:

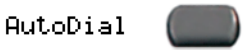
1. Press the **Display** key.



2. Press an **AutoDial** key in the upper display area to display the number associated with that key.

To use AutoDial:

1. Lift the handset.



2. Press an **AutoDial** key in the upper display area to dial the number associated with that key.

Using Ring Again

Use the Ring Again feature if you receive a busy tone or if there is no answer. Your IP Phone rings after the person you called becomes available. Ring Again automatically redials the number.

To activate Ring Again:

1. Dial a number and receive a busy tone or no answer.

or

2. Choose one of the following:
   - Press the **Ring Again** soft key.
   - Enter the **RingAgain Activate** FFC.

To call a Ring Again party when you receive notification:

1. After receiving the notification ring, lift the handset, or if you are using the headset, go to Step 2.

2. Press the **Ring Again** soft key to automatically dial the number.

To deactivate Ring Again before notification:

Choose one of the following:

- Press the **RingAgain** soft key a second time.
- Press the **RingAgain Deactivate** FFC.

Using Redial

Use the Last Number Redial feature to automatically redial the last dialed number.

To use Last Number Redial:

Choose one of the following:

1. To redial using the handset:
   a. Lift the handset.
   b. Press the line (DN) key.

2. To redial without lifting the handset, press the line (DN) key twice (the last number dialed is automatically redialed).

Using Speed Call

Use the Speed Call feature to place internal and external calls by dialing a one-, two-, or three-digit code to store, edit, and automatically dial frequently called telephone numbers.

To store a Speed Call number:

1. Press the **Speed Call Controller** soft key. The triangular icon flashes, indicating programming mode.

2. At the prompt:
   - Enter a one-, two-, or three-digit code (0-999).
   - If required, dial the access code.
   - Enter the telephone number (internal, external, or long-distance number).

3. Press the **Speed Call Controller** soft key again to save the code and number. The flashing icon turns off.

To make a Speed Call:

1. Lift the handset.

2. Press the **Speed Call Controller** soft key.

3. Dial the **Speed Call** code to automatically dial the number.

Using System Speed Call

Use the System Speed Call feature to dial Speed Call codes that override dialing restrictions placed on your telephone.

To make a System Speed Call:

1. Lift the handset.

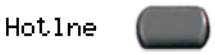
2. Choose one of the following:
   - Press the **System Speed Call** soft key.
   - Press the **System Speed Call Controller (SScCtl)** soft key.

3. Dial the **Speed Call** code to automatically dial the number.

Using Hot Line

Use the Hot Line feature to automatically dial a specific number.

To use Hot Line:



Press **Hot Line** to automatically dial the number.

Using Intercom calling

Use the Intercom feature to call a member of your intercom group by pressing the code assigned to each member.

To make an Intercom call:

1. Lift the handset.

2. Press the **Intercom** key.

3. Dial the one- or two-digit code for the desired intercom group member.

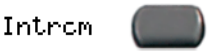
To answer an Intercom call while on a line other than your Intercom group line:

(Hold)

or

(Goodbye)

1. Choose one of the following keys:
   - Press the **Hold** key to put the current call on hold.
   - Press the **Goodbye** key to end the call.



2. Press the **Intercom** key and begin to speak.

Answering a call

Each incoming call causes the telephone to ring, the LCD indicator ☎ beside the line (DN) key to flash, and the Message Indicator lamp to flash.

> ***Note:*** During an incoming call, if you have a feature key page selected that does not contain the flashing DN line key, the display will revert to the active feature key page. This enables you to answer the call without having to press the shift key.

To answer a call:

Choose one of the following four options:

- Lift the handset.

or

- Press the **Handsfree** button located on the left side of the handset.

or

- Press the line (DN) key beside the LCD indicator as it flashes.

or

- Press the **Headset** key if a headset is connected to your telephone.

While on an active call

You can use the following features during an active call:

- “Placing a call on hold” on page 64
- “Transferring a call” on page 65
- “Using Timed Reminder Recall” on page 66
- “Using Attendant Recall” on page 67
- “Using Call Park” on page 67
- “Recording a Calling Party Number” on page 70
- “Displaying incoming calls” on page 70
- “Tracing a malicious call” on page 71
- “Incoming calls” on page 72

Placing a call on hold

Use the Hold feature when you are talking on one line and another call arrives on a second line. To retain the original call, put it on hold and then answer the second call.

To place a call on hold:

(Hold)

Press the **Hold** key. The LCD indicator flashes beside the line on hold.

Note: If **Automatic Hold** is enabled, the active call is automatically put on hold when you answer the second call.

To retrieve a call on hold:

Press the line (DN) key beside the flashing LCD indicator.

Transferring a call

Use the Transfer feature to redirect a call to the appropriate person.

To use the Transfer feature to direct a call to a third party:

1. Press the **Transfer** soft key. The other party is put on hold and a dial tone sounds. The LCD indicator light flashes steadily.

2. Dial the DN number to which the call is to be transferred or use **Personal Directory**, **Redial List**, or **Callers List** to select a number to dial.

3. After that number rings or a person answers, press the **Transfer** soft key to connect the calling party.

To return to the original call if the transfer is incomplete:

If the person called is not available, press the line (DN) key (next to the LCD indicator) to reconnect to the original call.

Using Timed Reminder Recall

Use the Timed Reminder Recall feature to receive a reminder tone when a transferred call is not answered.

To use Timed Reminder Recall:

1. Press the **Transfer** soft key. The call is put on hold.

2. Dial the number to which the call is being transferred.

or

3. Choose one of the following to start the call timer:
   - — Press the **Transfer** soft key.
   - — Replace the handset before the extension answers.

   Note: If the transfer is complete, the recall timer stops.

If the transferred call is not answered, your telephone rings:

1. Lift the handset to reconnect to the original caller.

or

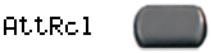
(Goodbye)

2. Choose one of the following:
   - Press the **Transfer** soft key and repeat the transfer.
   - If the transfer is picked up while you are on the line, press the **Goodbye** key to complete the transfer.

Using Attendant Recall

Use the Attendant Recall feature to contact an attendant during a call and to connect the call to the attendant.

To contact the attendant while on a call:



1. Press the **Attendant Recall** key and stay on the line until the attendant answers.

(Goodbye)

2. Press the **Goodbye** key. The caller remains connected to the attendant.

Using Call Park

Use the Call Park feature to hold temporarily (park) and retrieve a call from any telephone. Using Call Park does not tie up a line. When configured network-wide, Call Park can be used across networks. A System Park Extension can be configured to automatically park most calls.

To park a call on the System Park DN or your own DN:

During an active call, press the **Park** soft key twice.

Note: By default, the call is parked on your DN unless a **System Park** is enabled to automatically park calls on the system.

To park a call on a DN other than the System Park DN or your own DN:

1. Press the **Park** soft key.

2. Dial the DN where you want to park the call.

3. Press the **Park** soft key.

To park a call using the SPRE code or FFC:

1. Choose one of the following.
   - Press the **Transfer** soft key.
   - Press the **Conference** soft key.

2. Dial the **Call Park** FFC.

3. To use an alternate DN from the **System Park** DN or your own DN, dial the DN where you want to park the call. Otherwise, proceed to Step 4.

4. Choose one of the following.
   - Press the **Transfer** soft key.
   - Press the **Conference** soft key.

To retrieve a parked call:

1. Lift the handset.

2. Press the **Park** soft key.

3. Dial the DN where you parked the call.

   Note: If a parked call is not retrieved within a specified period of time, it rings back to your telephone or to the attendant.

Recording a Calling Party Number

Use the Calling Party Number feature to record a caller's number or to charge a call to an account number during an established call.

To record a caller's number for accounting purposes:

1. Press the **Call Party** soft key. The caller is placed on hold.

2. Dial a charge account number or the caller's number.

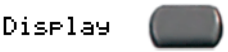
   Note: For information about using the **Charge** soft key, see "Charging a call or charging a forced call" on page 92.

3. Press the **Call Party** soft key to return to the call.

Displaying incoming calls

Use the Display feature to display a second incoming caller's number and name (if available) during an active call, without interfering with the call in progress.

To view the information about an incoming call while on a call in progress:



1. Press the **Display** key.

2. Press the flashing line (DN) key. The call waiting information appears.

   Note: You can use the **Display** key to show status information when using other feature keys.

Tracing a malicious call

Use the Call Trace feature to trace nuisance calls within your system.

Note: This is not a default feature. Contact your system administrator to configure this feature on your telephone.

To use Call Trace while on a call:

Press the **Call Trace** key.

To use Call Trace without a Call Trace key:

1. Choose one of the following:
   - Press the **Transfer** soft key.
   - Press the **Conference** soft key.

2. Dial the **SPRE code** followed by **83** or dial the **Call Trace** FFC to automatically reconnect.

Incoming calls

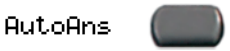
You can use the following features when you have an incoming call:

- “Using Automatic Answerback” on page 72
- “Using Call Pickup” on page 73
- “Using Call Waiting” on page 74

Using Automatic Answerback

When the Automatic Answerback feature is active, your telephone automatically answers in Handsfree mode after one ring; however, calls are not forwarded to the voice message service.

To activate Automatic Answerback:



Press the **Automatic Answerback** key.

To deactivate Automatic Answerback:

Press the **Automatic Answerback** key again.

Using Call Pickup

Use the Call Pickup feature to pick up calls from any telephone in the same pickup group or another pickup group.

To answer a call in your own call pickup group:

1. Lift the handset.

or

2. Choose one of the following:
   - Press the **Pickup** key.
   - Enter the **Pickup Ringing Number** FFC.

To answer an incoming call in another call pickup group:

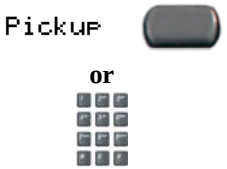
1. Lift the handset.

2. Choose one of the following:
   - Press the **Group Pickup** soft key.
   - Enter the **Pickup Group** FFC.

3. Dial the pickup group number of the ringing telephone.

To answer a call at a specific extension in any pickup group:

1. Lift the handset.



2. Choose one of the following:
   - — Press the DN **Pickup** key.
   - — Enter the **Pickup Directory Number** FFC.

3. Dial the DN of the telephone that is ringing (in your call pickup group). If the pickup DN or group number is invalid (an overflow burst tone sounds and the screen displays Release and try again), press the **Goodbye** key.

Using Call Waiting

The Call Waiting feature alerts you to an incoming call by producing a tone. It also puts the current call on hold while you answer the new call.

To answer an incoming call while on another call:

1. When the incoming call tone sounds, press the **Hold** key to put a current call on hold.

   Note: If **Automatic Hold** is enabled, it is not necessary to press the **Hold** key.

2. Press the **Call Waiting** key.

To return to the first telephone call:

(Hold)

or

(Goodbye)

1. Choose one of the following:
   - — Press the **Hold** key to put the second call on hold.
   - — Press the **Goodbye** key to end the second call.

2. Press the line (DN) key associated with the first call.

If you do not have a Call Waiting key:

(Goodbye)

1. Press the **Goodbye** key to end the current call.

2. Press the line (DN) key beside the flashing status icon to answer the incoming call.

While away from your desk

You can use the following features when you are away from your desk:

- “Using Call Forward” on page 76
- “Using Internal Call Forward” on page 77
- “Using Remote Call Forward” on page 78
- “Securing your telephone” on page 80

Using Call Forward

Use the Call Forward feature to direct incoming calls to ring on another line (DN). If the telephone is in the process of ringing, the call cannot be forwarded.

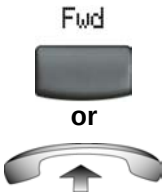
To forward your calls or change the forward number:

1. Choose one of the following:
   - — Press the **Forward** soft key.
   - — Lift the handset and enter the **Call Forward All Calls Activate** FFC.

2. Dial the DN where you want to forward your calls.

3. Press the **Forward** soft key.

To deactivate Call Forward:



Choose one of the following:

- Press the **Forward** soft key.
- Lift the handset and enter the **Call Forward All Calls Deactivate** FFC

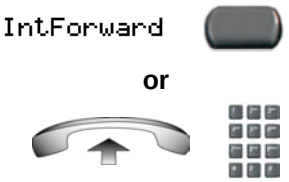
To reinstate Call Forward to the same number:

Press the **Forward** soft key twice.

Using Internal Call Forward

Use Internal Call Forward to accept only calls originating at internal DNs to ring at another DN. Calls originating outside your telephone system still ring at your telephone. Current incoming calls cannot be forwarded.

To forward internal calls:



1. Choose one of the following:
   - — Press the **Internal Call Forward** key.
   - — Lift the handset and enter the **Internal Call Forward Activate** FFC.

2. Dial the DN to which your internal calls will be forwarded.

3. Press the **Internal Call Forward** key.

To deactivate Internal Call Forward:

or

Choose one of the following:

— Press the **Internal Call Forward** key.

— Lift the handset and enter the **Internal Call Forward Deactivate** FFC.

To reinstate Call Forward to the same number:

Press the **Internal Call Forward** key twice.

Using Remote Call Forward

Use the Remote Call Forward feature to forward calls (from any telephone other than your own) to any telephone.

To activate Remote Call Forward:

1. Lift the handset.

2. If calling from a telephone outside the system, dial your direct system access number and wait for the dial tone.

3. Dial the **Remote Call Forward Activate** FFC to activate the feature.

4. Dial your **Station Control Password**. A dial tone sounds.

or

5. Choose one of the following:
   - Dial your DN.
   - To forward calls to the previous call forward telephone number, press the # key. (Do not perform steps 6 and 7).

6. Dial the number to which calls are being forwarded. If calls are forwarded to an invalid number, a fast busy signal sounds.

7. Press the # key.

To deactivate Remote Call Forward:

1. Lift the handset.

2. If calling from a telephone outside the system, dial the **direct system access** number and wait for the dial tone.

3. Dial the **Remote Call Forward Deactivate** FFC.

4. Dial your **Station Control Password**.

5. After hearing the dial tone, dial your DN.

6. Press the # key.

Securing your telephone

Use the Electronic Lock feature to prevent others from making calls from your telephone. The Electronic Lock feature is controlled using your SCPW. To change your SCPW, see “Security features” on page 20.

To lock your telephone:

1. Lift the handset.

2. Dial the **Electronic Lock Activate** FFC.

3. Dial your **Station Control Password**.

(Goodbye)

or

4. Choose one of the following:
   - — If dialing locally, press the **Goodbye** key.
   - — If dialing the FFC remotely, dial your DN.

To unlock your telephone:

1. Lift the handset.

2. Dial the **Electronic Lock Deactivate** FFC.

3. Dial your **Station Control Password**.

(Goodbye)

or

4. Choose one of the following:
   - — If dialing locally, press the **Goodbye** key.
   - — If dialing the FFC remotely, dial your DN.

Talking with more than one person

Use the following features to enable conversations between more than two people:

- “Using the Call Join feature” on page 82
- “Setting up a Conference call” on page 83
- “Using the Conferee Selectable Display and Disconnect feature” on page 84
- “Using Group Call” on page 85

Using the Call Join feature

Use the Call Join feature to connect a call to an active call. This creates a conference between the two callers and yourself.

To connect a call on hold (on a different line) to your current call:

1. Press the **Conference** soft key.

2. Press the line key that has the number of the caller you want to connect to your current call.

3. Press the **Conference** soft key to join the person on hold to your conversation.

Setting up a Conference call

Use the Conference feature to set up a conference call. The maximum number of people the Conference feature supports is either three or six, depending on the configuration of your telephone.

To set up a conference call:

1. While on a call, press the **Conference** soft key to place the party on hold. You receive a dial tone.

2. Dial the number of the person you want to add to the conference call. You can talk privately to the person you are adding at this time.

   Note: If you press the **Directory** key, you can also use **Corporate Directory** or **Personal Directory**, **Redial List**, and **Callers List** to find and dial the number of the person you want to add to the conference call.

3. Press the **Conference** soft key a second time to conference all parties together.

If the person you attempt to add to the conference is unavailable:

(Goodbye)

1. Press the **Goodbye** key.

2. Press the line (DN) key beside the flashing status icon to return to your original call.

Using the Conferee Selectable Display and Disconnect feature

Use the Conferee Selectable Display feature to list active conferees and disconnect a conferee from the conference call.

To view active conferees:

1. While on a conference call, press the **Conferee Selectable Display** key to turn on the LCD indicator. Each key press changes the screen to show a different active conferee.

   Note: This action has no effect on the display of the telephones of the other callers involved in the conference.

(Goodbye)

2. Press the **Goodbye** key. If configured, the **Conference Count Display** returns an updated total count of conferees. The LCD indicator turns off.

To disconnect a conferee:

1. While on a conference call, press the **Conferee Selectable Display** key until the conferee you want to disconnect appears on the screen.

2. Press the **DN** key on which the conference call is established.

(Goodbye)

3. Choose one of the following:
   - For a single conferee, press the **Goodbye** key. If configured, the **Conference Count Display** returns an updated total count of conferees. The LCD indicator turns off.
   - For multiple conferees, repeat steps 1 and 2 until all conferees are disconnected. Then press the **Goodbye** key.

Using Group Call

Use the Group Call feature to automatically call members of a predefined group, one at a time, until they all answer.

To call group members:

1. Lift the handset.

2. Press the **Group Call** key or enter the **Group Call FFC**.

   — The feature automatically calls all group members. The icon flashes until all members answer.

   — The telephone numbers of the group members appear on the display as they answer. When the last person answers, the **Group Call** indicator lights steadily.

   — If a member in your group is on a conference call or another group call, their phone is not connected to your group call.

   — After everyone in the group has answered, only the person who made the group call can put the call on hold.

To answer a Group Call:

1. Lift the handset. Note the following about Notification Tones:

   — If you are on a call and receive three 10-second tones, this is the notification of a group call on your current extension.

   — If you are on a call on another line and there is an attempt to join you to a group call, you receive a long tone through the handset or speaker.

   — If you are already on a conference call or another group call, you do not receive notification of a group call.

To end a Group Call:

(Goodbye)

Press the **Goodbye** key.

Note: When the person who made the group call disconnects, the call terminates for all members of the group. However, the members of the group call can disconnect from the call and not affect other members on the call.

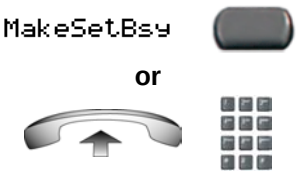
Working without interruption

This section describes the Activating Make Set Busy feature, which provides uninterrupted work time.

Using Make Set Busy

Use the Make Set Busy feature to make your telephone appear busy to all callers.

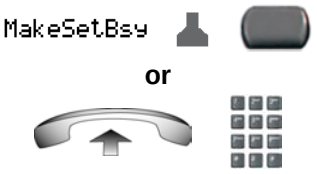
To activate Make Set Busy:



Choose one of the following:

- Press the **Make Set Busy** key.
- Lift the handset and enter the **Make Set Busy Activate** FFC.

To deactivate Make Set Busy:



Choose one of the following:

- Press the **Make Set Busy** key a second time to deactivate the feature.
- Lift the handset and enter the **Make Set Busy Deactivate** FFC.

Additional call features

Contact your system administrator to determine if the following call features are available on your telephone.

- “Using AutoDial Transfer” on page 89
- “Using the Buzz signal” on page 90
- “Using Call Page Connect to make an announcement” on page 90
- “Using Centrex/Exchange Line Switchhook Flash” on page 91
- “Charging a call or charging a forced call” on page 92
- “Using Enhanced Override” on page 95
- “Using Forced Camp-on feature” on page 96
- “Overriding a busy signal” on page 97
- “Using Privacy Release” on page 98
- “Using Radio Page” on page 99
- “Using Voice Call” on page 101

Using AutoDial Transfer

Use the AutoDial Transfer feature to transmit digits through your AutoDial key to the Central Office after a Trunk Switchhook Flash. You must be on a Central Office/Exchange (CO) trunk call from or to a Central Office (CO) that offers Centrex or exchange line-type features.

To use AutoDial Transfer when picking up an incoming trunk call:

CentrexSHF

1. Press the **Centrex Switchhook Line Flash** key and wait for interrupted dial tone.

AutoDial

2. Press the **AutoDial** key to call the number desired.

(Goodbye)

3. Press the **Goodbye** key to end the call.

Using the Buzz signal

Use the Buzz feature to notify another person of a call, a visitor, or a request. Two telephones that are linked together enable one person to signal the other. The person signaled hears a buzz.

To buzz the telephone linked to your telephone:

Buzz

Press the **Buzz** key.The telephone linked to your telephone buzzes as long as you press the key.

Using Call Page Connect to make an announcement

Use the Call Page Connect feature to make an announcement over a paging system.

> ***Note:*** A **Page** key on an attendant console overrides and disconnects the telephones. The telephones must reaccess the page trunk.

To connect to Call Page:

1. Lift the handset.

2. Dial the **Page Trunk Access Code** to complete the connection to the page system.
3. Make your announcement.

(Goodbye)

4. Press the **Goodbye** key.

Using Centrex/Exchange Line Switchhook Flash

Use the Centrex/Exchange Line Switchhook Flash feature during an established call to use a Centrex service, such as Call Transfer or Three-Way Calling.

To use Centrex/Exchange Line Switchhook Flash:

1. While on a call, press the **Centrex Line Switchhook Flash** key. A special dial tone sounds.

2. Dial the codes for your custom **Centrex** feature.

(Goodbye)

3. Press the **Goodbye** key to end the call.

Charging a call or charging a forced call

Use the Call Charge feature to charge a call to a specific account. The Forced Charge feature charges long-distance calls from a telephone restricted to local calls.

To charge a local or long-distance call to an account before you dial:

1. Lift the handset.

2. Choose one of the following:
   - Press the **Charge** soft key.
   - Dial the **Call Detail Recording** FFC.

3. Dial the charge account number.

4. When the dial tone sounds, dial the number.

To charge a call in progress:

or

1. Choose one of the following:
   - Press the **Transfer** soft key.
   - Press the **Conference** soft key.

2. Choose one of the following:
   - Press the **Charge** soft key.
   - Dial the **Call Detail Recording** FFC.

3. Dial the charge account number.

4. Press the line (DN) key to return to the call.

To charge a call to an account when you transfer a call:

1. Press the **Transfer** soft key. The call is placed on hold.

2. Choose one of the following:
   - Press the **Charge** soft key
   - Dial the **Call Detail Recording** FFC.

3. Dial the charge account number.

4. After the dial tone, dial the number to where the call is to be transferred.

5. Press the **Transfer** soft key when you hear the telephone ring.

   Note: You can talk privately to the person at the transfer number before you press the **Transfer** soft key.

To charge a call to an account when you add someone to a conference call:

1. Press the **Conference** soft key. The call is placed on hold.

or

2. Choose one of the following:

   — Press the **Charge** soft key.

   — Dial the **Call Detail Recording** FFC.

3. Dial the charge account number.

4. Dial the number of the person you want to add to the conference.

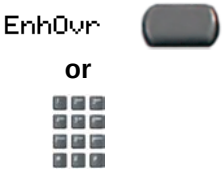
5. Press the **Conference** soft key.

Using Enhanced Override

Use the Enhanced Override feature to override an active call after you attempt a Forced Camp-on. Use Enhanced Override to make a simple call or a consultation call, such as placing a call on hold and calling another party.

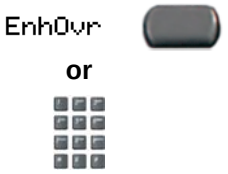
To use Enhanced Override:

You receive a busy signal after dialing a telephone number.



1. Choose one of the following:
   - — Press the **Override** key.
   - — Enter the **Override** FFC to initiate a Forced Camp-on.

   If either person on the call disconnects at this time, you receive an overflow (fast busy or engaged) signal.



2. Choose one of the following:
   - — Press the **Override** key again.
   - — Enter the **Override** FFC again.

   The other two persons on the call receive an override tone and a conference call is established between the three of you. If anyone disconnects, the other two persons remain connected.

(Goodbye)

3. To terminate the call, press the **Goodbye** key.

Using Forced Camp-on feature

Use the Forced Camp-on feature to automatically ring another telephone (internal or external) immediately after that telephone disconnects from its current call.

To use Forced Camp-on:

You receive a busy signal after dialing a telephone number.

EnhOvr

or

1. Choose one of the following:
   - — Press the **Override** key.
   - — Enter the **Override** FFC, to initiate a Forced Camp-on.

   Note: The person you called receives a tone. You receive a ring or ringback or a busy or engaged signal, depending on the options chosen. You are now camped-on to the number you dialed.
2. Hang up the telephone.
3. After the person you called finishes the call, your telephone automatically dials the number and both telephones ring.

Answering a call camped-on to your extension:

When your telephone rings, lift the handset.

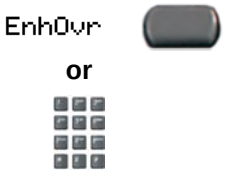
Note: You can program your telephone for either Camp-on or Call Waiting, but not both.

Overriding a busy signal

Use the Override feature to override a busy signal and interrupt another call.

To override a busy/engaged signal:

1. Dial a telephone number and receive a busy signal.



2. Choose one of the following:
   - — Press the **Override** key.
   - — Enter the **Override** FFC. The people in the targeted call receive a tone for approximately one second. After Override feature joins you to the call, a short tone repeats every 16 seconds.

(Goodbye)

3. To terminate the call, press the **Goodbye** key.

Using Privacy Release

Using the Privacy Release feature, one or more people who share your DN can join a call.

To use Privacy Release in an established state:

Press the **Privacy Release** soft key during a call.

Others can join the call by pressing the shared number (DN) key on the telephone (Multiple Appearance DN feature).

Using Radio Page

Use the Radio Page feature to page a person. The paged person answers the call after entering a special Page Meet-me code from any telephone.

To use Automatic Preselection (Meet-me page):

1. Lift the handset.

2. Dial the **Radio Paging Access** FFC. The paging tone sounds (two beeps followed by a dial tone).

3. Dial the number of the party you want to page. After dialing, the ringback tone sounds.

   Note: The paged person can use any telephone to enter a **Radio Paging Answer** FFC.

(Goodbye)

or

4. If your call goes unanswered for a preset time period and a 15-second high-pitched tone sounds followed by silence, press the **Goodbye** key or replace the handset.

To use Automatic Post selection:

The called party is either busy on the telephone or away from the desk. To page the called party, there is no need to redial the number of the called party.

1. Press the **Radio Page** soft key. A special dial tone sounds.

2. Dial the **Radio Paging Access** FFC. The ringback tone sounds.

   Note: The paged person can use any telephone to enter a **Radio Paging Answer** FFC.

(Goodbye)

or

3. If your call goes unanswered for a preset time period and a 15-second high-pitched tone sounds followed by silence, press the **Goodbye** key or replace the handset.

To answer a Radio Page:

If you carry a Radio Pager, a page indicates that someone dialed your DN. If the Radio Page system is configured to function in Meet-me mode, you can answer the page call from any telephone.

1. Lift the handset.

2. Dial the **Radio Page Answer** FFC. The paging tone sounds.

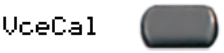
3. Dial your own DN to connect to the paging caller. If the caller has hung up, a steady high-pitched (Number Unavailable) tone sounds.

Using Voice Call

Use the Voice Call feature to page another person or make an announcement through someone else's telephone speaker.

To make a voice call:

1. Lift the handset.



2. Press the **Voice Call** key and make the announcement.

(Goodbye)

3. Press the **Goodbye** key.

To respond to a voice call:

Your telephone rings once and the caller's voice transmits through your speaker. Lift the handset.

Additional telephone features

The following features are described in this section:

- “Using Personal Directory” on page 102
- “Using Callers List” on page 105
- “Using Redial List” on page 107
- “Using Virtual Office” on page 109
- “Using Media Gateway 1000B” on page 117

Using Personal Directory

Use the Personal Directory feature to create and store up to 100 directory entries. A Personal Directory entry can contain:

- last name (up to 24 characters)
- first name (up to 24 characters)
- telephone numbers (up to 31 characters)

To use Personal Directory, press the **Directory** key and select **Personal Directory**.

To add an entry:

1. Press the **AddNew** soft key.

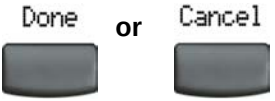
   Note: If the message Directory is full appears, one or more entries must be deleted to add a new entry.

2. Press the **Next** soft key.

3. Use the dialpad to enter the telephone number.

4. Press the **Next** soft key.

5. Use the dialpad to enter the name.



6. Do one of the following:
   - — Press the **Done** soft key to save the new entry.
   - — Press the **Cancel** soft key to return to the Add screen.

To edit an entry:

1. Press the **Up/Down** navigation keys to scroll and to highlight the desired entry.

2. Press the **Edit** soft key and perform your edits.

3. Choose one of the following:
   - — Press the **Done** soft key to save the changes.
   - — Press the **Cancel** soft key.

To delete an entry:

1. Press the **Up/Down** navigation keys to scroll and to highlight the desired entry.

2. Press the **Delete** soft key.

3. Choose one of the following:
   - Press the **Yes** soft key.
   - Press the **No** soft key.

To search for an entry:

1. Press the **Up/Down** navigation keys to scroll and to highlight the desired entry.

2. Choose one of the following:
   - Press the **Dial** soft key to dial the resulting number.
   - Press the **Cancel** soft key to exit without dialing.

Using Callers List

The Callers List feature logs all incoming calls. Callers List can store up to 100 entries in the list. When the list is full, the system overwrites the oldest entry. Use the Callers List feature to review missed calls and to dial calls. The Callers List contains:

- the caller's last and first name (if available)
- the DN of the caller
- the time and date of the call
- the number of times the caller has called

Entries in the Callers List are sorted by the time the call was received.

> ***Note:*** Calling Party Name Display (CPND) is affected depending on the preferred name match option. If preferred name match is on, the CPND appears according to your configurations. If the preferred name match option is off, the CPND appears according to the system configurations.

To access the Callers List, press the Directory key and select Callers List.

> ***Note:*** If password control has been enabled, enter your SCPW at the prompt.

To dial an entry:

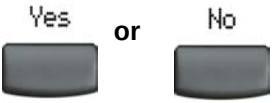
1. Press the **Up/Down** navigation keys to scroll and to highlight the desired entry.

2. Press the **Dial** soft key.

To delete an entry:

1. Press the **Up/Down** navigation keys to scroll and to highlight the desired entry.

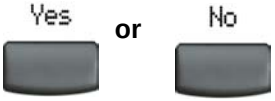
2. Press the **Delete** soft key.



3. Choose one of the following:
   - Press the **Yes** soft key.
   - Press the **No** soft key.

To delete the entire Callers List:

1. Press the **Delete** soft key.



2. Choose one of the following soft keys:
   - — **Yes** to delete entire Callers List.
   - — **No** to return to the previous screen.

Using Redial List

The Redial List feature logs all outgoing calls. Redial List can store up to 20 entries in the list. When the list is full, the system overwrites the oldest entry. Use the Redial List feature to review calls made and to redial previously dialed calls. The Redial List contains:

- the last and first names of the dialed party (if available)
- the DN of the dialed party
- the time/date of the last dialed occurrence

Entries in the Redial List are sorted by the time the call was received.

> ***Note:*** Calling Party Name Display (CPND) is affected depending on the preferred name match option. If preferred name match is on, the CPND appears according to your configurations. If the preferred name match option is off, the CPND appears according to the system configurations.

To access Redial List, press the Directory key and select Redial List.

> ***Note:*** If password control has been enabled, enter your SCPW at the prompt.

To dial an entry:

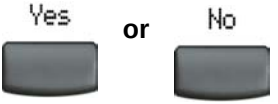
1. Press the **Up/Down** navigation keys to scroll and to highlight the desired entry.

2. Press the **Dial** soft key.

To delete an entry:

1. Press the **Up/Down** navigation keys to scroll and to highlight the desired entry.

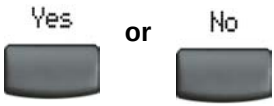
2. Press the **Delete** soft key.



3. Choose one of the following:
   - Press the **Yes** soft key.
   - Press the **No** soft key.

To delete the entire Redial List:

1. Press the **Delete** soft key.



2. Choose one of the following soft keys:
   - — **Yes** to delete entire Redial List.
   - — **No** to return to the previous screen.

Using Virtual Office

When you are away from your office telephone, use the Virtual Office feature to transfer the features on your office telephone and all of your calls to a remote telephone.

Note 1: Consult your system administrator to verify if the Virtual Office feature is available for your use.

Note 2: When designated as the office telephone, the IP Phone 2004 can be activated for Virtual Office by an IP Phone 2002, IP Softphone 2050, or another IP Phone 2004.

Note 3: When logged into an IP Phone 2004 or an IP Softphone 2050 using Virtual Office, feature keys 4, 5, and the shift key are not available to the IP Phone 2002.

Note 4: A Virtual Office login from an IP Phone 2004 to an IP Phone 2002 or IP Softphone 2050 might be blocked in certain situations.

Logging in to Virtual Office

To activate Virtual Office on your office telephone from your remote telephone:

(Services)

1. Press the **Services** key.

2. Press the **Up/Down** navigation keys to scroll and to highlight **Virtual Office Login**.

3. Press the **Select** soft key.

4. At the prompt, enter your user ID.

5. Press the **Select** soft key.

6. At the prompt, enter the home **Station Control Password (SCPW)**.

   Note 1: If the user ID is not found locally, the message Locating Remote Server appears.

   Note 2: After three failed login attempts, wait one hour before attempting to login again, or contact your system administrator to reset your password. For more information, see “Security features” on page 20.

   A successful login transfers all the features, time, date, and tones to your remote telephone from your office telephone.

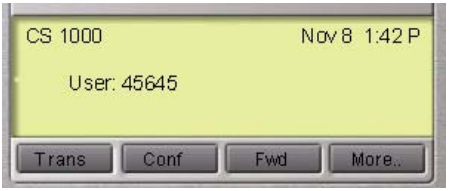
Using Virtual Office on your remote telephone

The following figures show various IP Phones logged on to an IP Phone 2004 using Virtual Office.

Figure 5: Logged on to an IP Phone 2004

Figure 6: Logged on to an IP Phone 2004 using an IP Phone 2002

Figure 7: Logged on to an IP Phone 2004 using an IP Softphone 2050



A user information line appears on all displays listing the number of your office telephone.

Using Virtual Office on your office telephone

When activated for Virtual Office by a remote telephone, your office telephone is logged out and no longer operational.

A Logged Out message appears on your telephone alerting you that it is being used for Virtual Office.

To regain operation of a telephone being used for Virtual Office:

Choose one of the following:

or

1. To completely disconnect your office telephone from the remote telephone:
   a. Press the **Home** key.
   b. Enter your user ID and password (this logs the office telephone back on to your office network).

2. To use your office telephone as the remote telephone for Virtual Office, press the **Virtual** soft key to log in to another IP Phone.

Logging out of Virtual Office

(Services)

1. Press the **Services** key.

2. Press the **Up/Down** navigation keys to scroll and to highlight **Virtual Office Logout**.

3. Press the **Select** soft key.

Troubleshooting Virtual Office

Virtual Office can cause error messages to display on-screen. Table 3 lists error messages and actions to correct the causes.

Table 3: Troubleshooting Virtual Office (Part 1 of 3)

Displayed Message	Probable Cause	Actions
Busy, try again	Remote IP Phone is active (not idle).	Wait for remote IP Phone to become idle and try again.
	ACD is logged in.	Log out of ACD IP Phone before initiating Virtual Office from another IP Phone.
	Make-Set-Busy is inactive on ACD IP Phone.	Configure Make-Set-Busy active on ACD IP Phone.
Invalid ID (1)	Incorrect user ID entered.	Enter correct user ID.
	user ID is not in Gatekeeper database.	Notify system administrator.
Invalid ID (2)	Incorrect user ID entered.	Enter correct user ID.
Invalid ID (3)	Incorrect user ID entered.	Enter correct user ID.
	user ID in Gatekeeper database points to originating call server.	Notify system administrator.

Table 3: Troubleshooting Virtual Office (Part 2 of 3)

Displayed Message	Probable Cause	Actions
Locked from Login	Three failed attempts to enter the correct Station Control Password.	Wait one hour for the lock to clear automatically, or notify system administrator to clear lock.
Permission Denied (1)	Remote telephone has no Station Control Password.	Notify system administrator.
Permission Denied (3)	Incorrect user ID entered.	Enter correct user ID.
	Remote telephone has no Station Control Password.	Notify system administrator.
Permission Denied (4)	Incorrect user ID entered.	Enter correct user ID.
	Attempt to log in to a remote IP Phone 2002 or IP Softphone 2050 from an IP Phone 2004 (some restrictions apply).	Go to an IP Phone 2002 or IP Softphone 2050 and try again, or consult your local system administrator.
Permission Denied (5)	Incorrect user ID entered.	Enter correct user ID.
	Remote telephone does not have VOLO Class of Service.	Notify system administrator.

Table 3: Troubleshooting Virtual Office (Part 3 of 3)

Displayed Message	Probable Cause	Actions
Permission Denied (6)	Incorrect user ID entered.	Enter correct user ID.
	Incorrect Station Control Password entered.	Select Retry, and try again with the correct Station Control Password.
Server Unreachable (1)	Network problem.	Notify system administrator, if problem persists.
Server Unreachable (2)	Network problem.	Notify system administrator, if problem persists.

Using Media Gateway 1000B

The Media Gateway 1000B (MG 1000B) telephone can operate in Normal or Local Mode.

Normal Mode

The telephone registers with the Main Office and receives telephone services from the Main Office. At any time during Normal Mode, you can check local mode functionality (make and receive calls) by enabling Local Mode and returning to Normal Mode. After testing, you can return to Normal Mode by using the Resume Normal Mode command or by waiting for 10 minutes.

Local Mode

If the WAN connection goes down, the IP Phone loses communication with the Main Office TPS. It then registers with the MG 1000B and receives telephone services from the MG 1000B. Features such as Personal Directory, Redial List, and Callers List are not available when operating in Local Mode. “Local Mode” appears on the telephone display when in Local Mode.

Using Test Local Mode

Use Test Local Mode to check local mode functionality (make and receive telephone calls). This is useful when provisioning has changed for an IP Phone on an MG 1000B Controller.

(Services)

1. Press the **Services** key.

2. Press the **Up/Down** navigation keys to scroll and to highlight Test Local Mode.

3. Press the **Select** soft key (the telephone resets and registers to the branch office)

Using Resume Normal Mode

Use the Resume Normal Mode command to return to normal mode after testing survival functionality.

Note: If the Resume Normal Mode command is not performed after testing, the telephone automatically returns to Normal Mode in ten minutes.

(Services)

1. Press the **Services** key.

2. Press the **Up/Down** navigation keys to scroll and to highlight **Resume Normal Mode**.

3. Press the **Select** soft key (the telephone registers back to the Main Office).

Troubleshooting MG 1000B

MG 1000B can cause error messages to display on-screen. Table 4 lists error messages and actions to correct the causes.

Table 4: Troubleshooting MG 1000B

Display Message	Probable Cause	Actions
Local Mode	Test Local mode.	Press the **Services** key, and then select Resume Normal Mode.
	Network problem.	Contact system administrator if problem persists.
Local Mode Invalid ID (1)	Gatekeeper unable to find end point from Branch user ID.	Notify system administrator.
Local Mode Invalid ID (2)	Branch user ID not found in any equipped Terminal Number (TN).	Notify system administrator.

Using Hospitality features

Hospitality features are intended for hotel operations.

Configuring Automatic Wake-Up

Use the Automatic Wake-Up feature to receive a timed reminder call. From your telephone, you can program the system to automatically place a call to you at a predetermined time. When you answer the call, recorded music plays for up to 30 seconds, followed by a prerecorded announcement or the attendant.

To enter the time for an Automatic Wake-Up call:

1. Lift the handset.

2. Dial the **Automatic Wake-Up Request** FFC.

3. Dial the **Automatic Wake-Up** time in a 24-hour time format (hhmm). A tone sounds to confirm your entered time.

   Note: In a 24-hour time format, 7:30 a.m. is entered as 0730; 9:45 p.m. is entered as 2145.

(Goodbye)

4. Press the **Goodbye** key.

To quit an Automatic Wake-Up call:

1. Lift the handset.

2. Dial the **Automatic Wake-Up Quit** FFC.

(Goodbye)

3. Press the **Goodbye** key.

To verify the time for the Automatic Wake-Up call:

1. Lift the handset.

2. Dial the **Automatic Wake-Up Verify** FFC.

3. Dial the **Automatic Wake-Up** time in a 24-hour time format (hhmm). If your query matches the preset time, a confirmation tone sounds.

   Note: In a 24-hour time format, 7:30 a.m. is entered as 0730; 9:45 p.m. is 2145.

(Goodbye)

4. Press the **Goodbye** key.

Activating Message Registration

Use the Message Registration feature to read, change, or reset meters that log your hotel telephone calls.

To read meters:

1. Press the **Message Registration** key.

2. Dial the room **Directory Number** (DN).

3. Press the **Message Registration** key.

To change a meter:

1. Press the **Message Registration** key.

2. Dial the room DN number.

3. Dial the correct meter count.

4. Press the ***** key.

5. Press the **Message Registration** key.

To reset a meter to zero:

1. Press the **Message Registration** key.

2. Dial the room Directory Number (DN).

3. Press the * key.

4. Press the **Message Registration** key.

Using Maid Identification

Use the Maid Identification feature to track the cleaning status of rooms. The maid enters the information from the telephone in each room.

To enter cleaning status:

1. Press the **Room Status** key.

2. Dial the **Directory Number** (DN) for the room for which the cleaning status is being changed.

3. Dial one of the following cleaning status codes:

   1 = Cleaning requested

   2 = Cleaning in progress

   3 = Room cleaned

   4 = Room passed inspection

   5 = Room failed inspection

   6 = Cleaning skipped

   7 = Not for sale

   The interrupted dial tone sounds.

4. Press the * key.

5. Dial the **Maid** ID. If you dial the wrong **Maid** ID, press the ***** key and redial the ID.

6. Press the **Room Status** key.

Using Display Room Status

Use the Room Status feature to view the status of a room using the Display Module.

To read the status of a room:

1. Press the **Room Status** key.

2. Dial the **Directory Number** (DN) for the room. The DN displays followed by a two-digit code.

   The first digit indicates the occupancy status:

   0 = Room vacant

   1 = Room occupied

   The second digit indicates the cleaning status of the room:

   1 = Cleaning requested

   2 = Cleaning in progress

   3 = Room cleaned

   4 = Room passed inspection

   5 = Room failed inspection

   6 = Cleaning skipped

   7 = Not for sale

RMK

3. Press the **Room Status** key.

Changing the status of a room:

RMK

1. Press the **Room Status** key.

2. Dial the **Directory Number** (DN) for the room. The DN displays followed by a two-digit code.

   The first digit indicates the occupancy status:

   0 = Room vacant

   1 = Room occupied

   The second digit indicates the cleaning status of the room:

   1 = Cleaning requested

   2 = Cleaning in progress

   3 = Room cleaned

   4 = Room passed inspection

   5 = Room failed inspection

   6 = Cleaning skipped

   7 = Not for sale

3. Dial the status code for the room. A three-digit code appears. The first digit indicates the occupancy status, the second is the old cleaning status, and the third is the new status.

RMK

4. Press the **Room Status** key.

Accessing External Server Applications

Use External Server Applications to access a variety of applications directly from your IP Phone 2004. For more information about the External Server Applications, see the *Nortel IP Phone External Server Applications User Guide* (NN43100-100).

Flexible Feature Codes (FFC)

Use Table 5 to track the FFCs assigned by your system administrator.

Table 5: Flexible Feature Codes

FFC	Feature	FFC	Feature
	Automatic Wake-Up Activate		Make Set Busy Activate
	Automatic Wake-Up Deactivate		Make Set Busy Deactivate
	Automatic Wake-Up Verify		Malicious Call Trace
	Call Detail Recording Charge Account		Override
	Call Forward All Calls Activate		Pickup Ringing Number
	Call Forward All Calls Deactivate		Pickup Directory Number
	Call Park		Pickup Group
	Electronic Lock Activate		Radio Paging Access
	Electronic Lock Deactivate		Radio Paging Answer
	Group Call		Remote Call Forward Activate
	Internal Call Forward Activate		Remote Call Forward Deactivate
	Internal Call Forward Deactivate		RingAgain Activate
	RingAgain Deactivate		Virtual Office Terminal Log Off
	Station Control Password Change		Virtual Office Terminal Log On

Accessories

IP Phone Key Expansion Module (KEM)

The Nortel IP Phone Key Expansion Module (KEM) is an optional hardware module that provides additional line appearances and feature keys on your IP Phone 2004.

Figure 8: The IP Phone KEM

You can connect up to two KEMs to your IP Phone 2004, providing a total of 48 additional keys. For more information about the IP Phone Key Expansion Module, see the *Nortel IP Phone Key Expansion Module (KEM) User Guide* (NN43119-102).

Regulatory and safety information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

  Note: The user should not make changes or modifications not expressly approved by Nortel Networks. Any such changes could void the user's authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Warnings:

- This is a Class B product. In a domestic environment this product can cause radio interference in which case the user must take adequate measures.
- Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

Table 6 lists EMC compliance for various jurisdictions.

Table 6: EMC Compliance

Jurisdiction	Standard	Description
United States	FCC CFR 47 Part 15	Class B Emissions: FCC Rules for Radio Frequency Devices
Canada	ICES-003	Class B Emissions: Interference-Causing Equipment Standard: Digital Apparatus
Australia/New Zealand	AS/NZS 3548 CISPR 22	Class B Emissions: Information technology equipment - Radio disturbance
European Community	EN 55022	Class B Emissions: Information technology equipment - Radio disturbance
	EN 55024	Information technology equipment - Immunity characteristics Limits and methods of measurement
	EN 61000-3-2	Limits for harmonic current emissions (equipment input current <= 16 A per phase)
	EN 61000-3-3	Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current <= 16 A
Japan	VCCI	Regulations for voluntary control measures.

Table 7: Safety

Jurisdiction	Standard	Description
United States	UL 60950-1	Safety of Information Technology Equipment
Canada	CSA 60950-1-03	Safety of Information Technology Equipment
European Community	EN 60950-1	ITE equipment - Safety - Part 1: General requirements
Australia/New Zealand	AS/NZS 60950.1:2003	Safety of Information Technology Equipment

Other Safety Approvals: IEC 60950-1: ITE equipment - Safety - Part 1: General requirements

Other

US/Canada: Hearing Aid Compatibility (HAC) as per FCC Part 68

This equipment complies with the CE Marking requirements. CE

Australia: AS/ACIF S004: Voice Frequency Performance Requirements for Customer Equipment

EU Countries: This device complies with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the Declaration may be obtained from http://www.nortel.com/corporate/community/environment/life_cycle/declarations.html or Nortel Networks GmbH address: Ingolstaedter Strasse 14-18, 80807 Munich Germany.

DenAn regulatory notice for Japan

⚠ Warning

Please be careful of the following while installing the equipment:

- Please only use the Connecting cables, power cord, AC adaptors shipped with the equipment or specified by Nortel to be used with the equipment. If you use any other equipment, it may cause “failures, malfunctioning or fire”.
- Power cords shipped with this equipment must not be used with any other equipment. In case the above guidelines are not followed, it may lead to death or severe injury

⚠ 警告

本製品を安全にご使用頂くため、以下のことにご注意ください。

- 接続ケーブル、電源コード、ACアダプタなどの部品は、必ず製品に同梱されております添付品または指定品をご使用ください。添付品・指定品以外の部品をご使用になると故障や動作不良、火災の原因となることがあります。
- 同梱されております付属の電源コードを他の機器には使用しないでください。

上記注意事項を守らないと、死亡や大怪我など人身事故の原因となることがあります。

Terms you should know

Attendant

A telephone operator in your organization.

AutoDial

A telephone number programmed on the **AutoDial** key for one-touch dialing.

Callers List

A list of all incoming calls (maximum 100 entries).

Calling Party Name Display (CPND)

Information appearing on the LCD display screen such as the caller's name and telephone number. The system must have CPND enabled.

Category 5 (Cat 5)

Balanced 100 Ohm cable and associated connecting hardware whose transmission characteristics are specified up to 100 MHz. It is used by 10Base-T, 100Base-T4, and 100Base-TX installations. The cable normally has four pairs of copper wire. Category 5 is the most popular cable used in new installations today.

Category 5e (Cat5e)

Most Cat5 cable manufactured after 1996 also supports 1000BaseT (GigE) installations, and is designated Cat 5e. Cat5e cable normally has four pairs of copper wire.

Communication Server 1000

An office communication system.

Copy key

A fixed key used to copy entries to your Personal Directory from other lists, such as the Caller List, Redial List, and Corporate Directory.

Date/Time display

The current date and time when the telephone is in an idle state.

Directory key

Enables access to Corporate Directory, Personal Directory, Redial List, and Callers List.

Directory Number (DN)

A number consisting of one to seven digits for a telephone. Also known as an extension number.

Expand to PC

A fixed key on your telephone used to access external server applications such as Net6.

Fastbusy

A signal given when all outgoing lines are busy.

Feature display

An area that shows status information about the feature in use. It also displays the name and status of the active session.

Fixed key

The hard-labeled keys on your telephone.

Flexible Feature Codes (FFCs)

Specialized codes entered using the dialpad that enable features, (for example, Automatic Wake-Up call).

Goodbye key

A fixed key used to end an active call.

Handsfree

A method of conversing with the party on the other end of the line without lifting your handset.

Headset key

A fixed key used to answer a call using the headset.

Hold key

A fixed key used to place an active call on hold.

Information display

Any display of call activity, lists, prompts, and status of calls.

Information line

A 1-line by 24-character area that displays the date and time or application information.

Interrupted dial tone

A broken or pulsed dial tone heard when you access some features on your telephone.

IP Phone Key Expansion Module (KEM)

An optional hardware module that provides additional line appearances and feature keys to your IP Phone. Up to two KEMs can be attached to your IP Phone 2004, providing a total of 48 keys.

Message (Inbox)

A fixed key that connects to your voice messaging system after the key is pressed.

Message waiting indicator or Incoming call indicator

An LCD or an LED light that indicates the status of a feature by the flash, wink, steady on, or off.

Meridian 1

An office communication system.

More..

An option that allows access to the multiple layers of the soft keys. Soft keys are the four keys located directly below the display area.

Mute key

A fixed key used to listen to the caller without transmitting.

Navigation keys

Up/Down and Left/Right keys used to scroll through menus and lists appearing on the LCD display screen.

Off-hook

Any line selected to make a call or receive an incoming call. The term off-hook is applied whether (a) the end user lifts up the handset, (b) the end user presses a line key, (c) the call is automatically answered at the set, or (d) a line is automatically selected for an outgoing call.

Outbox/Shift

A fixed key used to switch between two feature key pages to provide access to an additional six lines or features and an additional 24 lines on the IP Phone KEM.

Paging tone

A special tone heard when you use the Radio Paging feature. You hear two beeps followed by dial tone.

Password Admin

A menu used by you and the system administrator to change your station control password (SCPW).

Personal Directory

A list of user-defined names and numbers (maximum of 100 entries).

Primary directory number

The main extension number on your telephone.

Private line

A feature that can be assigned to your telephone. With this line, you can reach an outside number without dialing a code to access an outside line. Internal extensions cannot be dialed from a private line.

Programmable line (DN)/feature keys (self-labeled)

The six keys located at the sides of the upper area of the display.

Quit key

A fixed key on your telephone that is used to exit applications.

Redial list

A list of previously dialed telephone numbers (maximum 20 entries).

Ringback/ring tone

A sound indicating that a call you have made is ringing at its destination.

Secondary Directory Number

A second incoming or outgoing line for your telephone.

Services key

A fixed key used to access options such as Telephone Options, Password Admin, Display Network Diagnostics Utilities, Virtual Office Login, Virtual Office Logout, Test Local Mode, and Resume Normal Mode.

Shared Directory Number

A DN (extension) that is shared by two or more persons.

Soft keys (self-labeled)

A set of keys programmed by your system administrator. These four keys located directly below the display area have four programmable layers. The layers are accessed through the **More..** key. These keys are also used to configure parameters in the **Telephone Option** menu.

Speaker key

A fixed key used to activate Handsfree.

Special dial tone

The three consecutive tones followed by a dial tone that you hear when accessing telephone features.

Station Control Password (SCPW)

Enables security features on your phone to prevent others from making calls from your telephone and to access to your Personal Directory, Redial List, and Callers List.

Status messages

A message displayed to inform the user of important information. A right arrow appears if more than one Status Message is present. Examples of Status Messages include: Message Waiting, All Lines Forwarded to: 6453, Do Not Disturb On, Ring Again active, Ringer is OFF, and Line x Unavailable.

System or Switch

Your office communication system.

Switchhook

A button that the handset presses down, disconnecting your call when you replace the handset. The handset (when lifted) releases the switchhook and you either answer an incoming call or you receive a dial tone to make a call.

User interface

Screen displays that interact with the end-user as a result of an action or event.

Volume control bar

A rocker bar you press to increase or decrease the volume of the ringer, handset, headset, speaker, and the Handsfree feature.

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Nortel Communication Server 1000

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